

REMARKS

In the Office Action of September 3, 2008, claims 49 and 52-59 were rejected. The claims, as amended, are listed above. Claims 52 and 53 has been canceled. Claims 82-86 have been added. No new matter has been added. Accordingly, claims 49, 54-59 and 82-86 are now pending for examination.

Applicant respectfully requests reconsideration of the pending claims and respond to the Office Action as follows:

Interview Summary

An telephonic interview was held between Examiner and Applicant's representative on October 15, 2008. The participants discussed Examiner's assertion that the "metric query" of Draaijer included "metadata." Agreement was not reached.

Claim Rejections - 35 USC § 103

Claims 49, 52-59 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Draaijer et al. (U.S. 5,987,463)("Draaijer") in view of Shah et al. (U.S. 6,662,174 B2)("Shah").

Applicant respectfully traverses the rejections.

Present Invention

For ease of examination, claim 49, as amended, has been reproduced below. Amended claim 49 is directed towards a method for processing a query. The method comprises:

receiving from a first computer system a request to process a query at a second computer system, the request to process the query comprising a first object data and metadata about the first object data, and the query further comprising a request to perform an operation on the first object data and

metadata at the second computer system, the first computer system comprising a database to store object data including the first object data;

the second computer system processing the query with a database processing engine including performing the operation on the first object data and the metadata to generate a result for the query, the first object data and the metadata not having been stored on the second computer system prior to the second computer system receiving the request to process the query, the result based solely on the first object data and metadata within the request; and

the second computer system returning the result of the query to the first computer system.

Prior Art

Draaijer generally discloses accessing foreign processes in a heterogeneous database environment (Abstract). Specifically, Draaijer discloses a client 200 connected via line 310 to a local server process 202 (FIG. 2A). Draaijer explicitly states that metadata definitions for heterogeneous services are stored in the data dictionary 220, in the local process server 202 (8:20-22; also see FIG. 2A). The local process sever 202 includes a SQL services module 210b to parse SQL statements (9:26-32). Examiner acknowledges that Draaijer fails to disclose metadata utilized to process the query that is not stored on a second computer system prior to the second computer system receiving the request to process the query (Advisory Action of 8/13/87). Thus, Draaijer stores metadata on a server.

Shah generally discloses a method for determining database queries to be sent by an analytical server to a database (see Abstract). Particularly, Shah discloses a client 135, an analytical sever engine 120, and a metadata structures 145. The analytical server engine 120 accesses the metadata structures 145 responsive to a metric request from client 135.

Arguments

- A. *Draaijer and/ or Shah Do Not Teach or Suggest Receiving From a First Computer System a Request to Process a Query at a Second Computer System, the Request to Process the Query Comprising a First Object Data and Metadata About the First Object Data*

Amended claim 49 recites receiving from a first computer system a request to process a query at a second computer system. The request to process the query comprises a first object data and metadata about the first object data. Neither Draaijer or Shah disclose the limitation, either alone or in combination. Therefore, amended claim 49, and all related claims, are patentable for at least these reasons.

Draaijer

Examiner asserted that the data dictionary of Draaijer disclosed the data and metadata. Problematically, the data dictionary of Draaijer is stored on the local server 306 which is accessible to the local server 202, not on the client 200 (Draaijer 8:18-22). Thus, the client has no access to metadata. Consequentially, a request from the client 200 to the local server process 202 in Draaijer cannot include metadata from data dictionary 220, as in claim 49 in which the request does include first object data and metadata.

Examiner asserted that the object definitions of the DTY X table 224c in Draaijer discloses information about objects. However, the object definitions are stored on the local server 202 in Draaijer, not the client 200 (see FIG. 2A). Thus, a request from the client 200 to the local server process 202 in Draaijer cannot include object definitions.

Shah

Examiner also asserted that Shah discloses data and metadata in a metric request. Specifically, Examiner states in an Interview Summary that “[t]he metric

query must include the metadata because based on the metric query somehow the data and tables are measuring in response to the metric query.” Applicant respectfully disagrees.

First, Shah’s claim 1 explicitly specifies that metadata information is received by the analytical server from the RDBMS (Shah 11:42-43), not the client. This statement of Shah teaches away from claim 49 which includes metadata with the query. The metadata information about fact and dimension tables, received from the RDMS in Shah, is used to respond to the metric query (Shah 11:52-59). Thus, the metric query fails to include the necessary information about the data for processing. Also, Shah states that “[t]he client need not have knowledge of how the metric is calculated” (Shah 2:54-55), so the client of Shah is not providing additional information to help figure out the metric as stated by Examiner. Respectfully, Examiner’s mere assumption that the metric query inherently included the information necessary for measuring, is incorrect. Thus, there is no metadata in the metric query.

Furthermore, there is no object metadata in the metric query.

Moreover, the system architecture disclosed by Shah in FIG. 1 contradicts such an assertion because client 135 has no communication with the available metadata. In FIG. 1, client 135 is in communication with analytic server 120. In turn, analytic server 120 is in communication with metadata structures 145 (“analytical server engine 120...uses metadata structures 145 to identify the necessary fact components” Shah 2:41-44). Moreover, Shah is silent with respect to client 135 having any direct interaction with metadata structures 145. As a result, client 135 has no access to metadata when submitting a query. Thus, metadata cannot be included with the metric of Shah.

B. Draaijer and/ or Shah Do Not Teach or Suggest the First Computer System Comprising a Database to Store Object Data Including the First Object Data

Amended claim 49 recites that the first computer system comprises a database to store object data, including the first object data. Neither Draaijer of Shah disclose the limitation, either alone or in combination. Therefore, amended claim 49, and all related claims, are patentable for at least these additional reasons.

The clients of Draaijer and Shah both fail to disclose a client with a database storing object data. Client 200 of Draaijer does not include a database. The shared library 314 is located separately from client 200. Similarly, client 135 of Shah does not include a database. The RDBMS 105 is also located separately from client 135.

C. Draaijer and/ or Shah Do Not Teach or Suggest the Second Computer System to Generate a Result Based Solely on the First Object Data and Metadata Within the Request

Amended claim 49 recites that the second computer system generates a result based solely on the first object data and metadata within the request.

As discussed above, both Draaijer and Shah rely on metadata outside of the request. In Draaijer, the data dictionary 220 is accessed for metadata after receiving the client statement (Draaijer 8:21-22). In Shah, the RDMS 105 and/ or metadata structures is accessed by the analytic server 220 after receiving the metric query (see Shah 2:41-44; 11:52-59).

Neither Draaijer of Shah disclose the limitation, either alone or in combination. Therefore, amended claim 49, and all related claims, are patentable for at least these reasons.

D. *Draaijer and/ or Shah Do Not Teach or Suggest the Second Computer System Receives the Request to Process the Query in Accordance with a First Internet Protocol and Processes the Query in Accordance with a Second Internet Protocol*

Claim 56 recites that the second computer system receives the request in accordance with a first Internet protocol and process the query in accordance with a second Internet protocol.

Examiner cited a portion of Draaijer that discloses a first heterogeneous services module 311 which invokes a second heterogeneous services module 311' (Draaijer 5:47-67). But there is no mention of Internet protocols in the citation.

Examiner also cited a portion of Draaijer that discloses converting parameters that are received over a network from a SQL data type to a data type native to an external routine (e.g., C or C++)(Draaijer 13:4-8). However, a conversion of parameters relates to data carried by packets, whereas the Internet protocol relates to the structure of the packets themselves. Thus, the parameter conversions of Draaijer fail to disclose the two Internet protocols of claim 56.

Shah fails to cure the deficiencies of Draaijer.

Therefore, claim 56 is patentable for at least these additional reasons.

E. *Draaijer and/ or Shah Do Not Teach or Suggest a Hand-Held Server Device*

New claim 84 recites that the second computer system comprises a hand-held server device. Support for the amendment can be found in the Specification, for example, on page 7, line 5.

Draaijer and Shah are silent with respect to a hand-held server device. Thus, claim 84 is patentable for at least these additional reasons.

F. *Draaijer and/ or Shah Do Not Teach or Suggest a Query
Comprising a Pointer to a First Object Data and Metadata About
the First Object Data, the Pointer Referring to a Database on a
Third Computer System*

New claim 85 recites a pointer to a first object data and metadata about the first object data. The pointer refers to a database on a third computer system.

Examiner asserted that the link 310 discloses a pointer with respect to now canceled claim 52. However, the link 310 of Draaijer is merely a network connection between local server 202 and agent 300, not a pointer (see e.g., “establishes a network connection 310” 11:7-8; “set up a connection 310 with the corresponding foreign system” 11:54-55; “creates a connection 310a” 12:51-52). Thus, the network connection of Draaijer fails to disclose the pointer of claim 84.

Shah fails to cure the deficiencies of Draaijer.

Therefore, claim 85 is patentable over Draaijer and/ or Shah for these additional reasons.

CONCLUSION

Applicant's attorney believes this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,

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